6GN8

High-Mu Triode— Sharp-Cutoff Pentode

9-PIN MINIATURE TYPE

GENERAL DATA

Electrical:

Heater, for Unipotential Cathodes:		
Voltage (AC or DC)	6.3 ± 10%	volts
Current at 6.3 volts	0.75	amp
Direct Interelectrode Capacitances:[a]		
Triode Unit:		
Grid to plate	4.4	μμf
Grid to cathode and heater	2.4	μμf
Plate to cathode and heater	0.36	μμf
Pentode Unit:		
Grid No.1 to plate	0.1 max.	μμf
Grid No.1 to cathode & internal shield & grid No.3, grid No.2, and heater	11	μμf
Plate to cathode & internal shield & grid No.3, grid No.2, and heater	4.2	μμf
Triode grid to pentode plate	0.018 max.	μμf
Pentode grid No.1 to triode plate	0.005 max.	μμf
Pentode plate to triode plate	0.17 max.	μμf

Characteristics, Class A_1 Amplifier:

	Triode Unit	*Pentode Unit*		
Plate Supply Voltage	250	60	200	volts
Grid-No.2 Supply Voltage	–	150	150	volts
Grid-No.1 Voltage	-2	0	–	volts
Cathode Resistor	–	–	100	ohms
Amplification Factor	100	–	–	
Plate Resistance (Approx.)	37000	–	60000	ohms
Transconductance	2700	–	11500	μmhos
Plate Current	2	55[b]	25	ma
Grid-No.2 Current	–	18[b]	5.5	ma
Grid-No.1 Voltage (Approx.) for plate μa = 100	–	–	-10	volts
Grid Voltage (Approx.) for plate μa = 20	-5	–	–	volts

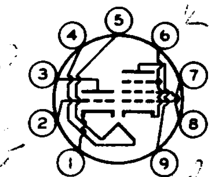
Mechanical:

Operating Position	Any
Maximum Overall Length	2-5/8"
Maximum Seated Length	2-3/8"
Length, Base Seat to Bulb Top (Excluding tip)	2" ± 3/32"
Diameter	0.750" to 0.875"
Dimensional Outline	See *General Section*
Bulb	T6-1/2

6GN8

Base. . . . . .Small-Button Noval 9-Pin (JEDEC No.E9-1)
Basing Designation for BOTTOM VIEW. 9DX

Pin 1 - Triode Cathode
Pin 2 - Triode Grid
Pin 3 - Triode Plate
Pin 4 - Heater
Pin 5 - Heater



Pin 6 - Pentode Cathode, Grid No.3, Internal Shield
Pin 7 - Pentode Grid No.1
Pin 8 - Pentode Grid No.2
Pin 9 - Pentode Plate

AMPLIFIER — Class A_1

Maximum Ratings, *Design-Maximum Values:*

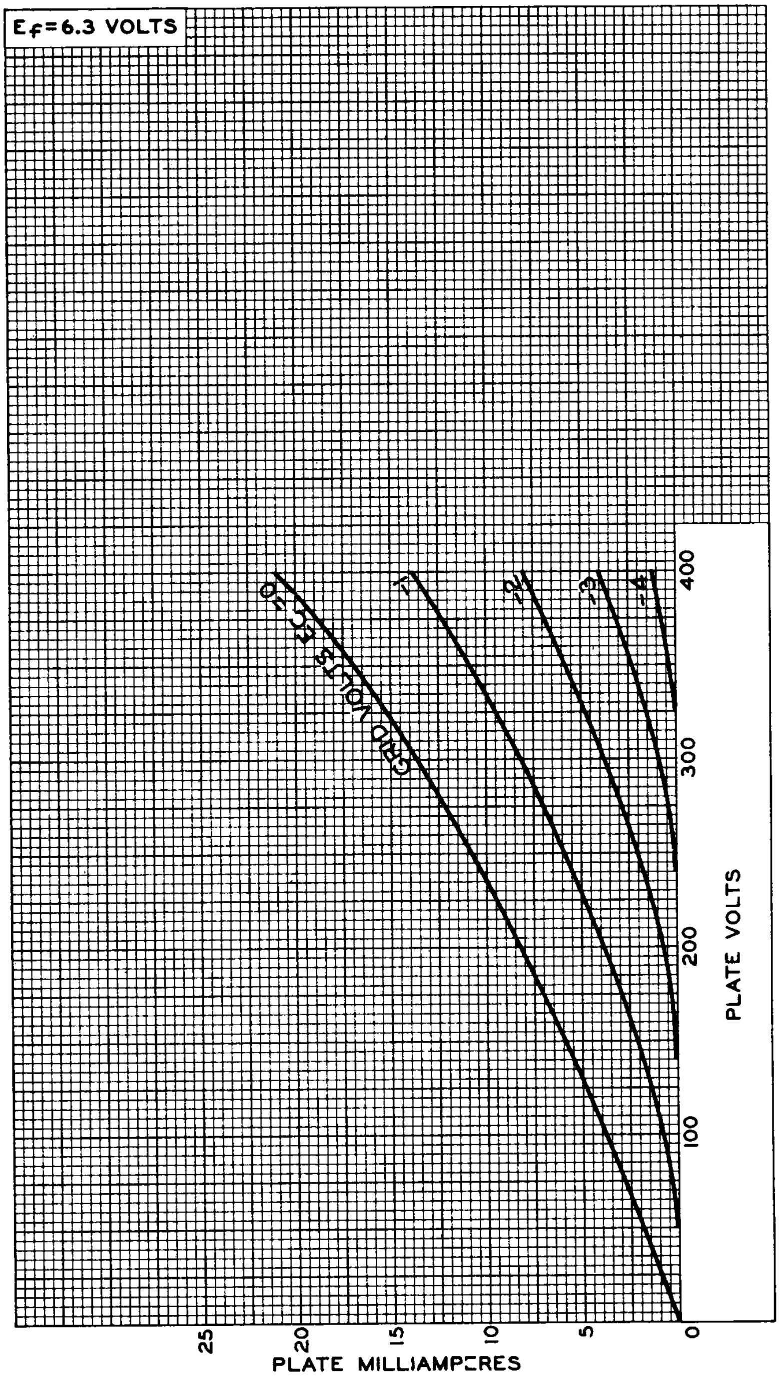
	Triode Unit	*Pentode Unit*	
PLATE VOLTAGE	330 max.	330 max.	volts
GRID-No.2 (SCREEN-GRID) SUPPLY VOLTAGE.	–	330 max.	volts
GRID-No.2 VOLTAGE	–	See *Grid-No.2 Input Rating Chart* at front of Receiving Tube Section	
GRID-No.1 (CONTROL-GRID) VOLTAGE:			
Positive-bias value	0 max.	0 max.	volts
PLATE DISSIPATION	1 max.	5 max.	watts
GRID-No.2 INPUT:			
For grid-No.2 voltages up to 165 volts	–	1.1 max.	watts
For grid-No.2 voltages between 165 and 330 volts .		See *Grid-No.2 Input Rating Chart* at front of Receiving Tube Section	
PEAK HEATER-CATHODE VOLTAGE:			
Heater negative with respect to cathode.	200 max.	200 max.	volts
Heater positive with respect to cathode.	200[c] max.	200[c] max.	volts

Maximum Circuit Values:

	Triode Unit	*Pentode Unit*	
Grid-No.1-Circuit Resistance:			
For fixed-bias operation. . .	0.5 max.	0.25 max.	megohm
For cathode-bias operation. .	1 max.	1 max.	megohm

[a] Without external shield.
[b] This value can be measured by a method involving a recurrent wave form such that the maximum ratings of the tube will not be exceeded.
[c] The dc component must not exceed 100 volts.

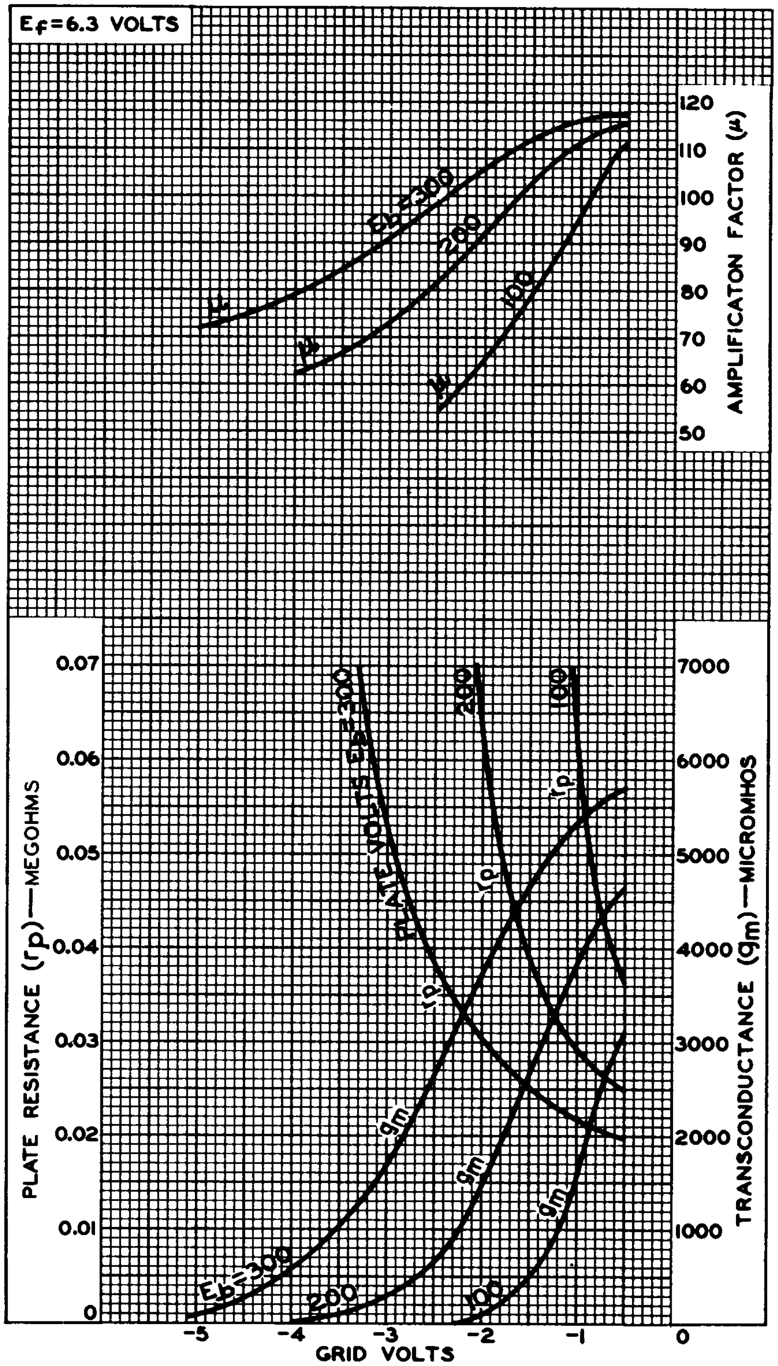
AVERAGE PLATE CHARACTERISTICS
Triode Unit



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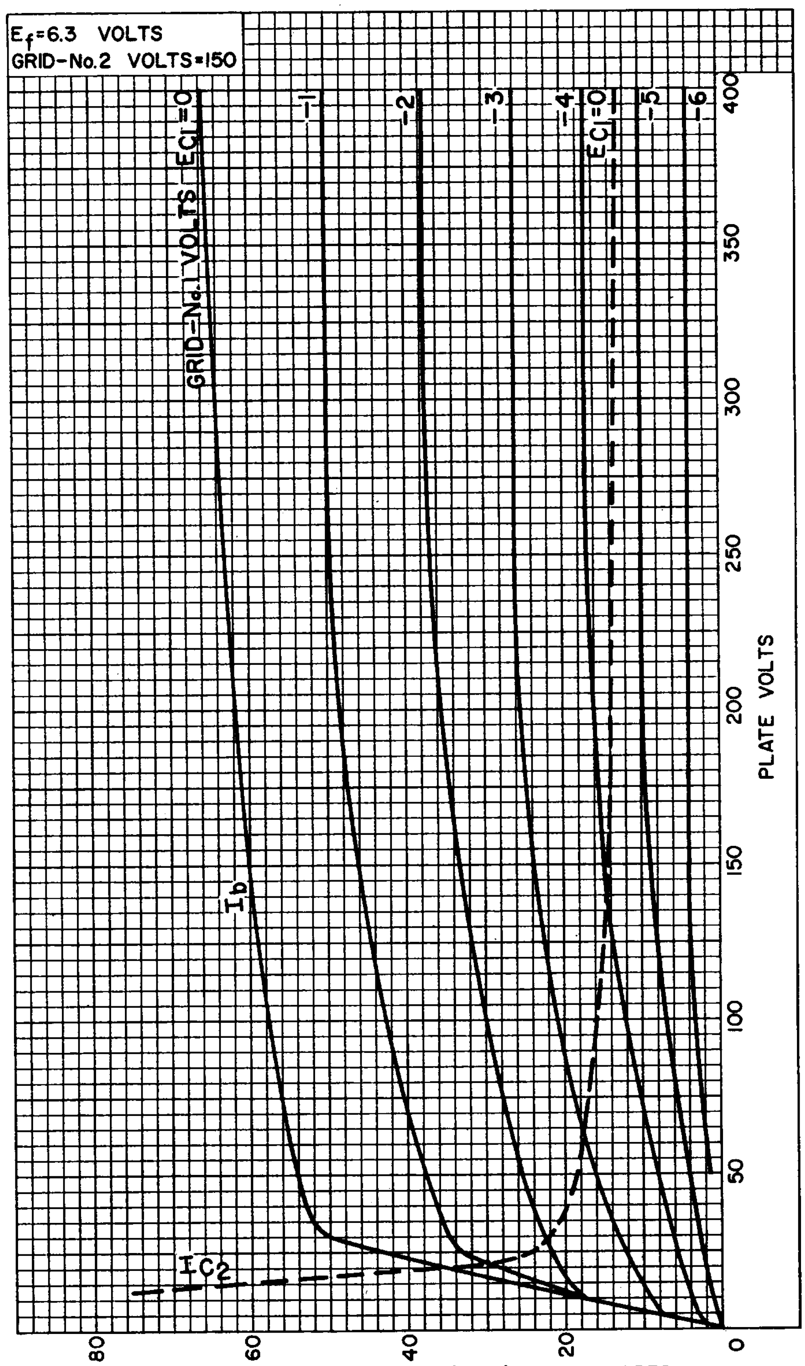
6GN8

AVERAGE CHARACTERISTICS
Triode Unit



92CM-11025

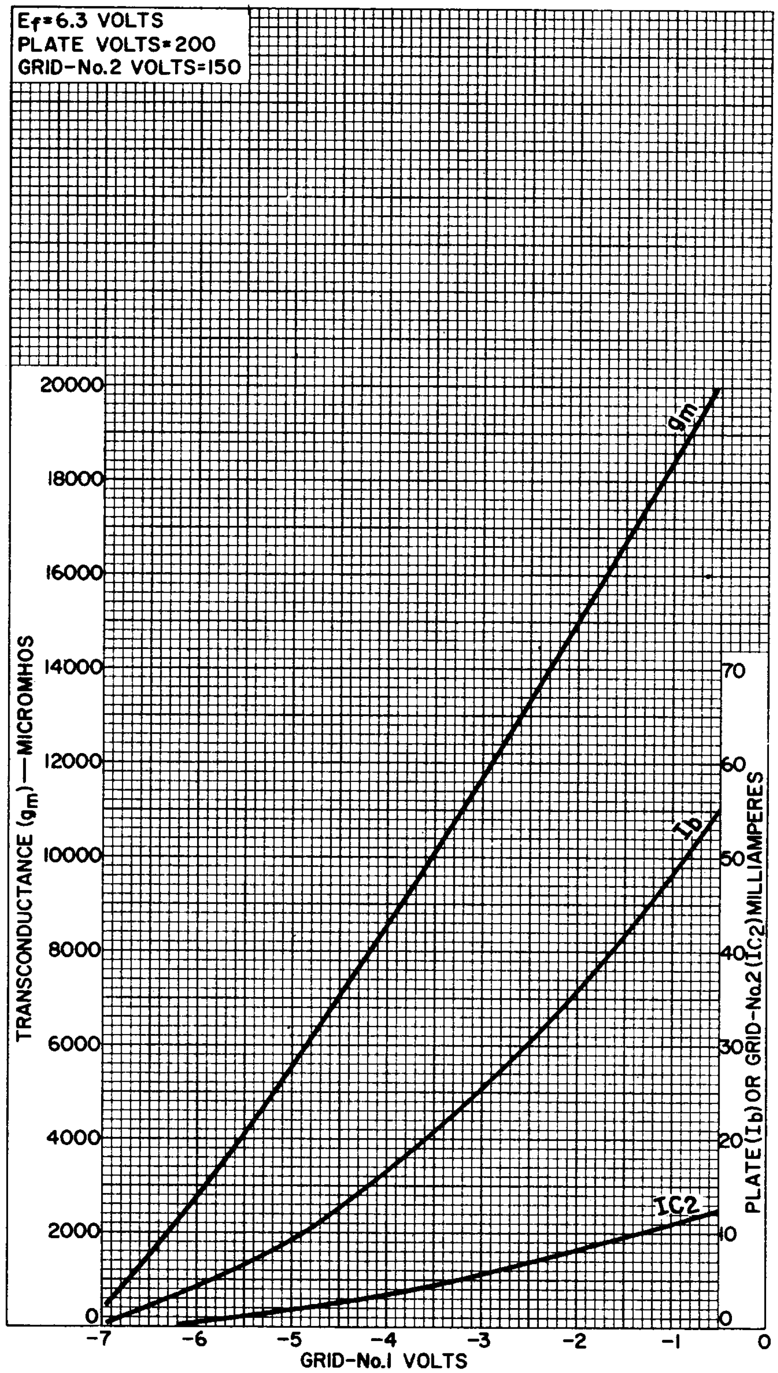
AVERAGE CHARACTERISTICS
Pentode Unit



92CM-11021

6GN8

AVERAGE CHARACTERISTICS
Pentode Unit



92CM-11022